

404

- 5  
10  
15  
20  
25  
30

the terminal device, wherein the terminal device is configured to issue requests for web pages with a return address of the network operations center.

8. An asymmetric satellite based terminal device configured to utilize an IP address belonging to a network operations center.

5 9. The asymmetric satellite based terminal device of claim 12 including a personal computer having a modem, an expansion card based satellite receiver, and an operating system, the operating system including the standard TCP/IP stack, and an application program for assigning the IP address as a return address of the asymmetric satellite based terminal device, wherein the asymmetric satellite based  
10 terminal device is configured to issue requests for web pages with a return address of the network operations center.

15 10. A network comprising: a satellite, an Internet, a network operations center coupled to the Internet and configured to provide uplink data to the satellite responsive to data received via the Internet, and an Internet service provider network having a cache facility and a slave reader for downloading data from the satellite to the cache facility, a router and a plurality of modems, at least a first connection via the router and the modems being configured to be coupled to an symmetric Internet user and at least a second connection via the router and the modems being configured to be coupled to an asymmetric Internet user having a  
20 satellite receiver, wherein the cache facility outputs data to both the symmetric and asymmetric Internet users responsive to requests.

25 11. A network comprising: a satellite, an Internet, a network operations center coupled to the Internet and configured to provide uplink data to the satellite responsive to data received via the Internet, and an Internet service provider network having a cache facility and a slave reader for downloading data from the satellite to the cache facility, a router and a plurality of modems configured to receive requests from a plurality of users and to transmit data, responsive to the requests, back to the users, the cache facility receiving cache updates from the satellite responsive to user requests.

30 12. The network of claim 15 wherein the slave reader includes a filter for filtering data downloaded from the satellite.

00532804 032100

SB

5

10

15

4 B

20

25

30

30

21. A method of managing a multicast server located at a central location comprising utilizing a plurality of multicast management stations located at remote locations to control distribution of multicast data from the multicast server.

22. The method of claim 27 wherein the multicast server includes utilizing a supervisory program to limit control functions available to the plurality of multicast management stations.

23. A method of operating an asymmetric Internet access system comprising configuring an Internet service provider network to process a token assigned to an individual user and to dynamically assign IP address of a Network Operations Center to the individual user irrespective of whether the individual user has a user ID and Password assigned to the Internet service provider wherein users may roam among different Internet service providers while keeping the same user name and password.

24. A method comprising configuring an Internet service provider to return data requested by users from resources which are connected to a first hop via terrestrial links and to return data requested by the users from resources which are connected to a second hop via a satellite link.

25. A cable system comprising a cable distribution network including a plurality of remote Internet user terminals and a cable head-end comprising an asymmetric satellite based proxy server having an Internet connection and satellite connection, and a cache coupled to and providing data to the proxy server, wherein the proxy server is configured such that web requests initiated by one of the remote Internet user terminals may be returned either via the Internet connection or via the satellite connection.

00522804-032400

8B4